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Leon Benhamou

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EXAMINER

MCCARTHY, CHRISTOPHER S

ART UNIT

PAPER NUMBER

2113

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/667,722	BENHAMOU ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER MCCARTHY	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-33, 35-48, 50, 51 and 53-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-44 and 55 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 10-13, 15-19, 23-30, 35, 36, 45, 50, 53 and 54 is/are rejected.
- 7) ☒ Claim(s) 4, 6-8, 14, 20-22, 31-33, 46-48 and 51 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 45, 50 are rejected under 35 U.S.C. § **103(a)** as being unpatentable over US Patent No. 6,978,398 of Harper et al. referred hereinafter “Harper ‘398” in view of US Patent No. 4,245,342 of Entenman.

Examiner notes that Harper ‘398 (see column 1 lines 8-12) incorporates by reference US Patent No. 6, 629,266 of Harper et al. referred hereinafter “Harper ‘266”, which is introduced in the rejection below.

In regards to claim 45, Harper ‘398 discloses a method of facilitating protection switching comprising:

Art Unit: 2113

facilitating a protection switching configuration operation wherein a failure prediction condition for at least a portion of a plurality of protected system elements is defined (see column 2 lines 23-26);

facilitating a failure confirmed protection switching operation in response to identifying that the failure prediction condition for one of said protected has been met during operation of said protected system elements (see column 6 lines 18-25);

facilitating an administrator-initiated protection switching operation in response to receiving, at a system administrator user interface (figure 18 or Harper '266) of a protected system comprising the plurality of protected system elements, an administrator-issued protection switching initiation notification (see column 4 lines 20-27 of incorporated by reference Harpter '266) .

However, Harper '398 fails to explicitly disclose:

specifying a protection switching priority for at least a portion of said protected system elements;

determining that the protection switching priority among a collection of failure predicted system elements applies to the one of said protected system elements prior to facilitating the failure confirmed protection switching operation.

Entenman further discloses in case of multiple failures, allotting a spare device among the devices in accordance with a priority algorithm (see column 6 lines 38-42); and determining that the protection switching priority among a collection of failure predicted system elements applies to the one of said protected system elements prior to facilitating the failure confirmed protection switching operation (column 6, lines 38-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Harper and Enteman to allot a spare device among the devices in accordance with a priority algorithm, thus indicating specifying a protection switching priority for at least a portion of said protected system elements. A person of ordinary skill in the art could have been motivated to combine the teachings because Harper is concerned with failing over nodes for preventing degradation of performance (see figure 5b; column 1 lines 62-65, column 2 lines 23-26, and column 6 lines 39-42), and allotting a spare device among the devices in accordance with a priority algorithm, as per teachings of Entenman (see column 6 lines 38-42), constitutes as suitable known means for failing over nodes.

In regards to claims 50, Harper '398 in view of Entenman discloses the claim limitations as discussed above. Harper '398 further discloses:

downloading service information of the failure predicted one of said protected system elements to the protection system element after identifying the failure predicted one of said protected system elements (see column 2 lines 23-26);

confirming failure of the first failure predicted one of said protected system elements (see column (see column 6 lines 20-25); and

switching communication service supported by the failure predicted one of said protected system elements for being supported by to the protection system element after confirming said failure (see column 6 lines 20-25).

Art Unit: 2113

Claims 1-3,5,10,12-13, 15-19, 23,27,29-30,35,36 are rejected under 35 U.S.C. § **103(a)** as being unpatentable over Harper '398 (which incorporates by reference Harper '266) in view of Entenman and US Patent No. 4,769,761 of Downes et al. referred hereinafter "Downes".

In regards to claim 1, Harper '398 discloses a method of facilitating protection switching to enhance performance of a network system, comprising:

identifying a failure predicted one (see column 2 lines 19-23) of a plurality of protected system elements (see column 4 lines 23-27); and

implementing a protection switching operation for switching designated information from the failure predicted one of said protected system elements to a protection system element (see column 2 lines 23-26).

However, Harper '398 fails to explicitly disclose:

wherein identifying the failure predicted on of said protected system elements includes assessing performance of said protected system elements based at least partially on an element demerit point level of each one of said protected system elements

and at least partially on a protection switching priority for at least a portion of said protected system elements.

Entenman further discloses in case of multiple failures, allotting a spare device among the devices in accordance with a priority algorithm (see column 6 lines 38-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Harper and Entenman to allot a spare device among the devices in accordance with a priority algorithm, thus indicating at least partially on a protection switching priority for at least a portion of said protected system elements. A person of ordinary

Art Unit: 2113

skill in the art could have been motivated to combine the teachings because Harper is concerned with failing over nodes (see column 2 lines 23-26; figure 5b and column 6 lines 39-42), and allotting a spare device among the devices in accordance with a priority algorithm, as per teachings of Entenman (see column 6 lines 38-42), constitutes as suitable known means for failing over nodes that further enables recovery of higher priority device.

Downes further discloses the concept of predicting a failure upon determination the error count over a selected number of operations is above a criterion or threshold (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Harper, Entenman, and Downes to further including predicting a failure upon determination the error count over a selected number of operations is above a criterion or threshold, thus indicating wherein identifying the failure predicted on of said protected system elements includes assessing performance of said protected system elements based at least partially on an element demerit point level of each one of said protected system elements. A person of ordinary skill in the art could have been motivated to combine the teachings because Harper is concerned with detecting degradation of performance of a computer system (see column 1 lines 60-65), and monitoring the error count over a selected number of operations, as per teachings of Downes (abstract), constitutes as suitable known means to detect degradation of performance of a computer system.

In regards to claim 2, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses wherein identifying the failure predicted one of said protected system elements includes assessing at least one of a plurality of failure prediction parameters of said protected system elements for determining when a failure

Art Unit: 2113

prediction condition has been met by one of said protected system elements (see column 9 lines 15-20 of incorporated by reference Harper '266).

In regards to claim 3, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses

monitoring a failure prediction parameter of at least one of the plurality of protected system elements (see column 9 lines 15-20 of incorporated by reference Harper '266); and

correlating a present state of the failure prediction parameter to a failure prediction criterion for determining whether the failure prediction parameter has met a failure prediction condition (see column 9 lines 15-20 of incorporated by reference Harper '266).

In regards to claim 5, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses wherein the monitoring the failure prediction parameter further comprises bridging the protection system element across the at least one of the plurality of the protected system elements (see column 6 lines 13-17).

In regards to claim 10, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Downes further discloses wherein assessing performance of said protected system elements includes determining when an element demerit point level of one of said protected system elements has exceeded a predetermined element demerit point threshold limit (abstract).

In regards to claim 12, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Downes further discloses wherein the element demerit point level corresponds to a quantity of element demerit points accumulated over a designated period of time (abstract).

Art Unit: 2113

In regards to claim 13, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Downes further discloses wherein identifying the failure predicted one of said protected system elements includes determining that a rate of change of element demerit points for one of said protected system elements has exceeded a predetermined element demerit point rate of change (abstract).

In regards to claim 15, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Entenman further discloses determining that a protection switching priority among a collection of failure predicted system elements applies to the failure predicted one of said protected system elements (see column 6 lines 38-42).

In regards to claim 16, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Entenman further discloses wherein implementing the protection switching operation is initiated after determining that the protection switching priority applies to the failure predicted one of said protected system elements (see column 6 lines 38-42).

In regards to claim 17, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Entenman further discloses wherein determining that the protection switching priority applies to the failure predicted one of said protected system elements includes assessing a protection switching priority parameter for each system element of the collection of failure predicted system elements (see column 6 lines 38-42).

In regards to claim 18, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Downes further discloses

Art Unit: 2113

wherein assessing the protection switching parameter includes assessing at least one of a parameter relating to element demerit points, a parameter relating to a rate of change of said element demerit points, a parameter relating to an element demerit point threshold limit, a parameter relating to a number of active connections, a parameter relating to a number of active service subscribers, a parameter designated in a service agreement, a mounted position in a network element, an administrator-assigned priority value, a data bit rate and a rate of change of the data bit rate (abstract).

In regards to claim 19, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses:

downloading service information of the failure predicted one of said protected system elements to the protection system element after identifying the failure predicted one of said protected system elements (see column 6 lines 14-17);

confirming failure of the first failure predicted one of said protected system elements (see column 6 lines 18-25); and

switching communication service supported by the failure predicted one of said protected system elements for being supported by to the protection system element after confirming said failure (see column 6 lines 21-25).

In regards to claim 23, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses wherein the protection system element provides protection switching functionality exclusively for all of said protected system elements (see column 6 lines 35-40).

Art Unit: 2113

In regards to claim 27, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses wherein identifying the failure predicted one of said protected system elements includes determining that a failure prediction parameter associated with the failure predicted one of said protected system elements has exceeded a failure prediction parameter first threshold limit (see column 9 lines 6-10 and 25-28 of incorporated by reference Harper '266).

In regards to claim 29, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses wherein the protection system element provides protection switching functionality exclusively for all of said protected system elements (see column 6 lines 35-37).

In regards to claim 30, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses configuring protection switching variables associated with the protection switching operation (see column 9 lines 7-14 of incorporated by reference Harper '266).

In regards to claim 35, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses wherein identifying the failure predicted one of said protected system elements includes assessing a protection switching operation initiation notification issued via a system administrator user interface (see column 4 lines 20-22 of incorporated by reference Harper '266).

In regards to claim 36, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses:

Art Unit: 2113

downloading service information of the failure predicted one of said protected system elements to the protection system element after identifying the failure predicted one of said protected system elements (see column 6 lines 14-17);

switching communication service supported by the failure predicted one of said protected system elements for being supported by to the protection system element after downloading said service information (see column 6 lines 21-25) but before an actual failure (column 4, lines 11-17).

Claims 11, 24-26, 28 are rejected under 35 U.S.C. § **103(a)** as being unpatentable over Harper '398 (which incorporates by reference Harper '266) in view of Entenman, Downes, and US Patent No. 6,771,440 of Smith.

In regard to claim 11, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. However, Harper '398 in view of Entenman and Downes fails to explicitly disclose:

wherein the predetermined element demerit point threshold limit is associated with a first level of failure probability, lower than an element demerit point threshold limit corresponding to a next higher level of failure probability.

Smith discloses a system wherein a first threshold triggers a predictive failure analysis and a second threshold greater than the first threshold signifies a failure (see column 6 lines 6-20).

Art Unit: 2113

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Harper, Entenman, Downes, and Smith to include a second threshold that signifies a failure in addition to a first threshold that predicts a failure, indicating wherein the predetermined element demerit point threshold limit is associated with a first level of failure probability, lower than an element demerit point threshold limit corresponding to a next higher level of failure probability. A person of ordinary skill in the art could have been motivated to combine the teachings because Harper discloses a first threshold that predicts a failure is to follow (see column 9 lines 7-14 and lines 25-30 of incorporated by reference Harper '266) and is further concerned with signifying a system element has failed (see column 6 lines 5-25) and having a second threshold that signifies a failure, as per teachings of Smith (see column 6 lines 6-20), provides a known and suitable means to signifying the system element has failed.

In regards to claims 24, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. Harper '398 further discloses:

wherein identifying the failure predicted one of said protected system elements includes determining that a failure prediction parameter associated with the failure predicted one of said protected system elements has exceeded a failure prediction parameter first threshold limit (see column 9 lines 6-10 and 25-28 of incorporated by reference Harper '266);

Harper further discloses said switching communication service is initiated in response to determining the protected system element has failed. Harper discloses if it is determined that the primary node has failed, then the process continues at which time the secondary node becomes the primary node (see column 6 lines 21-25).

Art Unit: 2113

However, Harper '398 in view of Entenman and Downes fails to explicitly disclose:
said switching communication service is initiated in response to the failure prediction parameter exceeding a failure prediction parameter second threshold limit different than the failure prediction parameter first threshold limit.

Smith discloses a system wherein a first threshold triggers a predictive failure analysis and a second threshold greater than the first threshold signifies a failure (see column 6 lines 6-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Harper, Entenman, Downes, and Smith to include a second threshold that signifies a failure in addition to a first threshold that predicts a failure, thus indicating said switching communication service is initiated in response to the failure prediction parameter exceeding a failure prediction parameter second threshold limit different than the failure prediction parameter first threshold limit. A person of ordinary skill in the art could have been motivated to combine the teaching because Harper discloses a first threshold that predicts a failure is to follow (see column 9 lines 7-14 and lines 25-30 of incorporated by reference Harper '266) and is further concerned with signifying a system element has failed (see column 6 lines 5-25) and having a second threshold that signifies a failure, as per teachings of Smith (see column 6 lines 6-20), provides a known and suitable means to signifying the system element has failed.

In regards to claim 25, Harper '398 in view of Downes, Entenman, and Smith discloses the claim limitations as discussed above. Smith further discloses:

Art Unit: 2113

wherein the failure prediction first threshold limit is associated with a first level of failure probability and the failure prediction second threshold limit is associated with a second level of failure probability higher than the first level of failure probability (see column 6 lines 12-13).

In regards to claim 26, Harper '398 in view of Downes, Entenman, and Smith discloses the claim limitations as discussed above. Harper '398 further discloses:

wherein identifying the failure predicted one of said protected system elements includes determining that a failure prediction parameter associated with the failure predicted one of said protected system elements has exceeded a failure prediction parameter first threshold limit (see column 9 lines 6-10 and 25-28 of incorporated by reference Harper '266);

Harper further discloses confirming failure includes determining the protected system element has failed (see column 6 lines 21-25).

However, Harper '398 in view of Entenman and Downes fails to explicitly disclose:

confirming failure includes determining that the failure prediction parameter has exceeded a failure prediction parameter second threshold limit different than the failure prediction parameter first threshold limit.

Smith discloses a system wherein a first threshold triggers a predictive failure analysis and a second threshold greater than the first threshold signifies a failure (see column 6 lines 6-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Harper, Entenman, Downes, and Smith to include a second threshold that signifies a failure in addition to a first threshold that predicts a failure, thus indicating confirming failure includes determining that the failure prediction parameter has

Art Unit: 2113

exceeded a failure prediction parameter second threshold limit different than the failure prediction parameter first threshold limit. A person of ordinary skill in the art could have been motivated to combine the teaching because Harper discloses a first threshold that predicts a failure is to follow (see column 9 lines 7-14 and lines 25-30 of incorporated by reference Harper '266) and is further concerned with signifying a system element has failed (see column 6 lines 5-25) and having a second threshold that signifies a failure, as per teachings of Smith (see column 6 lines 6-20), provides a known and suitable means to signifying the system element has failed.

In regards to claim 28, Harper '398 in view of Entenman and Downes discloses the claim limitations as discussed above. However, Harper '398 in view of Entenman and Downes fails to explicitly disclose:

wherein implementing said protection switching operation is performed in response to determining that the failure prediction parameter has exceeded a failure prediction parameter second threshold limit different than the failure prediction parameter first threshold limit.

Smith discloses a system wherein a first threshold triggers a predictive failure analysis and a second threshold greater than the first threshold signifies a failure (see column 6 lines 6-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Harper, Entenman, Downes, and Smith to include a second threshold that signifies a failure in addition to a first threshold that predicts a failure, thus indicating wherein implementing said protection switching operation is performed in response to determining that the failure prediction parameter has exceeded a failure prediction parameter second threshold limit different than the failure prediction parameter first threshold limit. A

Art Unit: 2113

person of ordinary skill in the art could have been motivated to combine the teaching because Harper discloses a first threshold that predicts a failure is to follow (see column 9 lines 7-14 and lines 25-30 of incorporated by reference Harper '266) and is further concerned with signifying a system element has failed (see column 6 lines 5-25) and having a second threshold that signifies a failure, as per teachings of Smith (see column 6 lines 6-20), provides a known and suitable means to signifying the system element has failed.

Claims 53 are rejected under 35 U.S.C. § **103(a)** as being unpatentable over Harper '398 (which incorporates by reference Harper '266) in view of Entenman and Smith.

In regards to claim 53, Harper '398 in view of Entenman discloses the claim limitations as discussed above. Harper '398 further discloses:

wherein identifying the failure predicted one of said protected system elements includes determining that a failure prediction parameter associated with the failure predicted one of said protected system elements has exceeded a failure prediction parameter first threshold limit (see column 9 lines 6-10 and 25-28 of incorporated by reference Harper '266);

Harper further discloses confirming failure includes determining the protected system element has failed (see column 6 lines 21-25).

However, Harper '398 in view of Entenman fails to explicitly disclose:

confirming failure includes determining that the failure prediction parameter has exceeded a failure prediction parameter second threshold limit different than the failure prediction parameter first threshold limit.

Art Unit: 2113

Smith discloses a system wherein a first threshold triggers a predictive failure analysis and a second threshold greater than the first threshold signifies a failure (see column 6 lines 6-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Harper, Entenman, and Smith to include a second threshold that signifies a failure in addition to a first threshold that predicts a failure, thus indicating confirming failure includes determining that the failure prediction parameter has exceeded a failure prediction parameter second threshold limit different than the failure prediction parameter first threshold limit. A person of ordinary skill in the art could have been motivated to combine the teaching because Harper discloses a first threshold that predicts a failure is to follow (see column 9 lines 7-14 and lines 25-30 of incorporated by reference Harper '266) and is further concerned with signifying a system element has failed (see column 6 lines 5-25) and having a second threshold that signifies a failure, as per teachings of Smith (see column 6 lines 6-20), provides a known and suitable means to signifying the system element has failed.

Claim 54 is rejected under 35 U.S.C. § **103(a)** as being unpatentable over Harper '398 (which incorporates by reference Harper '266) in view of Downes.

In regards to claim 54, Harper '398 discloses an apparatus capable of facilitating protection switching, comprising:

a plurality of protected system elements (see column 4 lines 23-27).

Art Unit: 2113

a protection system element including a data processor and capable of providing protection switching functionality for at least one of said protected system elements (see column 2 lines 23-26).

a data processor program wherein the data processor program is capable of enabling the protection system elements to facilitate (see column 2 lines 23-26.)

identifying a failure predicted one (see column 2 lines 19-23) of a plurality of protected system elements (see column 4 lines 23-27).

implementing a protection switching operation for switching designated information from the failure predicted one of said protected system elements to a protection system element (see column 2 lines 23-26).

However, Harper fails to explicitly disclose:

wherein identifying the failure predicted on of said protected system elements includes determining the rate of change of element demerit points for one of said protected system elements has exceeded a predetermined element demerit point rate of change threshold limit.

Downes discloses the concept of predicting a failure upon determination the error count over a selected number of operations is above a criterion or threshold (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Harper and Downes to further including predicting a failure upon determination the error count over a selected number of operations is above a criterion or threshold, thus indicating wherein identifying the failure predicted on of said protected system elements includes determining the rate of change of element demerit points for one of said protected system elements has exceeded a predetermined element demerit point rate

Art Unit: 2113

of change threshold limit. A person of ordinary skill in the art could have been motivated to combine the teachings because Harper is concerned with detecting degradation of performance of a computer system (see column 1 lines 60-65), and monitoring the error count over a selected number of operations, as per teachings of Downes (abstract), constitutes as suitable known means to detect degradation of performance of a computer system.

Allowable Subject Matter

1. Claims 37-44, 55 are allowed.
2. Claims 4, 6-8, 14, 20-22, 31-33, 46-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

3. Applicant's arguments filed 6/17/11 have been fully considered but they are not persuasive.

Claim 1 et al. with regard to 103 Motivation:

It is apparent that the applicant and the examiner respectfully disagree with another over the motivation and legal precedence of the combination of used references. The examiner is

Art Unit: 2113

willing to accept judgment thereon from the BOA, if the case comes to that conclusion, rather than continually the same points.

Claim 45, 50:

No new arguments have been cited that has not already been addressed in previous actions.

Claim 1:

Applicant argues that Downes does not teach a “failure prediction level”. The examiner has previously cited the incorrect passage. This teaching is in the abstract of Downes, as well as throughout the entire reference, which the examiner requests the applicant to consider as a whole.

Claim 2:

The applicant submits that “monitoring” does not disclose "...identifying the failure predicted one of said protected system elements.... to said protected system elements." The examiner respectfully disagrees. Harper gives a parameter monitoring that triggers an event when a parameter is at a certain level per failure threshold. Examiner interprets this as the claimed language.

Claim 3:

Please see argument 2 above as the argument is essentially the same.

Art Unit: 2113

Claim 5:

There is no substantial argument per claim 5, just that claim 5 is dependent on claim 3 as a whole, therefore, please see claim 3 as a rejection as a rejection on claim 5 as a whole.

Claim 10:

There is no substantial argument per claim 10, just that claim 10 is dependent on claim 1 as a whole, therefore, please see claim 1 as a rejection as a rejection on claim 10 as a whole.

Claim 12:

The applicant has asked the examiner to explain the difference between "implicitly teaches" and "inherently teaches" and what legal authority on which the examiner is basing the distinction therein. The examiner cites the MPEP section 2112:

The express, implicit, and inherent disclosures of a prior art reference may be relied upon in the rejection of claims under 35 U.S.C. 102 or 103.

The examiner cites that the MPEP does have distinction between the three possible disclosures. Furthermore, the examiner directs the applicant to the mere definitions of implicit versus inherent. Implicit can be defined, as example, as implied or understood, though no directly expressed; and inherent defined as, for example, existing as an essential constituent characteristic or intrinsic.

Claim 13:

Art Unit: 2113

The applicant requests the examiner how “counts” teaches “determining a rate of change”. The examiner interprets “counts” implicit of counting, which is a rate of change.

Claim 15:

The applicant argues that Entenman does not teach “a collection of failure predicted system elements”. The examiner respectfully disagrees. Entenman states, in column 6, lines 35-42, “among the modules 10 in case of multiple failure”; the examiner interprets this as a collection. Furthermore, Entenman states “allot the redundant modem among the modules 10 in case of multiple failure”; the examiner interprets the multiple failure as inclusive of the claimed “predicted one” language.

Claim 16:

There is no substantial argument per claim 16, just that claim 16 is dependent on claim 15 as a whole, therefore, please see claim 15 as a rejection as a rejection on claim 16 as a whole.

Claim 18:

Applicant argues that Downes does not teach a “failure prediction level”. The examiner has previously cited the incorrect passage. This teaching is in the abstract of Downes, as well as throughout the entire reference, which the examiner requests the applicant to consider as a whole. The examiner also does not agree that the reference teaches away from the claim language by merely stating the prior invention lacked a certain feature; in fact, mentioning the lacking acknowledges the knowledge and teaching of the feature.

Art Unit: 2113

Claim 19:

There is no substantial argument per claim 19.

Claim 23:

There is no substantial argument per claim 23.

Claim 24-26:

The applicant argues that Smith does not teach "said switching communication service is initiated in response to the failure prediction parameter exceeding a failure prediction parameter second threshold limit different than the failure prediction parameter first threshold limit." The examiner respectfully disagrees. Smith teaches a failure prediction analysis of operating parameter with respect to two thresholds wherein the second threshold is higher/ different than the first threshold.

Claim 27:

The applicant does not agree with examiner's previous argument; however, the examiner respectfully maintains his argument.

Claim 29:

There is no substantial argument per claim 29, just that claim 29 is dependent on claim 1 as a whole, therefore, please see claim 1 as a rejection as a rejection on claim 29 as a whole.

Art Unit: 2113

Claim 30:

There is no substantial argument per claim 30.

Claim 35:

The applicant submits the examiner does not allege any teaching with respect to “assessing...”. The examiner respectfully disagrees. In Harper, the operator is notified and can initiate a planned outage over an unplanned outage; that is, the operator gets the assessment from the analytical aggregate of the indicators of the resource monitoring mechanisms.

Claim 36:

The claim 36 has been amended; however, the new language only says the switching communication service needs to be supported before an actual failure. The examiner contends that Harper does teach the support, as cited in the new language rejection citations.

Claim 28:

Please see argument per claim 1 above per reference combination motivation.

Claim 53:

There is no substantial argument per claim 53.

Claim 54:

Art Unit: 2113

There is no substantial argument per claim 54.

Claim 45:

There is no substantial or new argument per claim 45.

All arguments from the applicant in the Remarks from page 40 thereon present no new arguments that have not already been addressed in previous actions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER MCCARTHY whose telephone number is (571)272-3651. The examiner can normally be reached on M-F, 9 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 2113

/Christopher S. McCarthy/
Primary Examiner, Art Unit 2113